REMARKS

Claims 1-14, 17, and 23 are currently pending in this application. Claims 1 and 4 have been amended. Claims 15-16 and 18-22 and 24-29 have been canceled without prejudice. No new matter has been added. The amendments merely remove non-elected subject matter.

The following remarks put the pending claims in condition for allowance. Applicants respectfully request reconsideration and the timely allowance of the pending claims.

Information Disclosure Statement

The Office Action states that the Information Disclosure Statement of September 23, 2004 fails to comply with 37 CFR 1.98(a)(2) because the Miyama et a. and Voet et al. references were not submitted with the Information Disclosure Statement. However, in accordance with 37 CFR 1.98(d)(1) and (2), copies of these references are not required as copies of these references were supplied in parent application Serial No. 09/438,046. Further, parent application Serial No. 09/438,046 is referenced in the Information Disclosure Statement of September 23, 2004 and is relied on for an earlier effective filing date.

Claim Objections

Claims 1, 4, and 23 stand object to for allegedly reciting non-elected sequences. Applicants respectfully submit that the above amendments obviate this objection.

Claims 5-7 stand objected to for containing typographical errors. Applicants respectfully submit that the above amendments obviate this objection.

35 U.S.C. § 112 Rejections

Claims 1-14, 17, and 23 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly containing subject matter which is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention at the time the application was filed.

Specifically, the Office alleges that claims 1-14, 17, and 23 are drawn to a genus of nucleic acids that is defined solely by sequence identity or hybridization ability and that the polypeptides encoded by these nucleic acids are not required to possess any particular biological activity and as such one of ordinary skill in the art would not envision that the inventors had possession of the claimed nucleic acids at the time the instant application was filed.

Applicants respectfully disagree. Applicant submits that the Notice, entitled, "*Guidelines for Examination of Patent Applications under the 35 U.S.C. 112, ¶1. Written Description" Requirement* at p. 1104, vol. 66, no. 4 (January 5, 2001) addresses the written description provision as follows (emphasis added):

An applicant shows possession of the claimed invention with all its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. Possession may be shown in a variety of ways including description of an actual reduction to practice, or by

showing that the invention was "ready for patenting" by the disclosure of drawings or structural chemical formulas that show that the invention was complete, or by describing distinguishing characteristics sufficient to show that the applicant was in possession of the claimed invention.

The specification teaches that the PDGF-D polypeptide is a growth factor. Applicant notes that the specification discloses the nucleotide sequence of a partial human cDNA clone, SEQ.ID. NO: 5, that encodes hPDGF-D. The amino acid sequence of hPDGF-D is also provided as SEQ ID NO: 6. See paragraph 00119. In addition, the specification further describes the structure of PDGF-D. See paragraphs 00120-00124. Applicant submits that this recitation of the nucleotide sequence, coupled with the structure of PDGF-D establish possession of the invention by showing that the invention was "ready for patenting" by the disclosure of structural chemical formulas that show the invention was complete. Further, claims 1-14, 17, and 23, as amended, are drawn to nucleic acids encoding polypeptides having PDGF-D activity. In particular, claim 1, upon which all of the other claims depend from, includes the limitation "a polynucleotide encoding a polypeptide having a PDGF-D activity and having a sequence identity of at least 85% with at least nucleotides 1 to 966 of SEQ ID NO:5." This limitation clearly requires that the nucleic acids of the claims encode polypeptides having PDGF-D activity and further provides structure of the nucleic acid sequence. As such, there is clearly a function to structure relationship. Thus, one of ordinary skill in the art would immediately recognize

that the inventors had the claimed invention in their possession at the time the application was filed.

Accordingly, reconsideration of the Written Description Requirement rejection under 35 U.S.C. 112, first paragraph, is respectfully requested. Claims 1-14, 17, and 23 stand rejected under 35 U.S.C. § 112, first paragraph, based on an assertion that the specification, while being enabling for the polypeptide of amino acid number 6, does not reasonably provide enablement for "biologically active protein with either 85%, 90%, or 95% identity to amino acid sequence of SEQ ID NO: 6 or hybridization under stringent conditions." Applicants respectfully disagree. As an initial matter, Applicant respectfully submits that claims 1-14, 17, and 23 as amended, are drawn to nucleic acids encoding polypeptides having PDGF-D activity and there is no recitation in these claims regarding a "biologically active protein with either 85%, 90%, or 95% identity to amino acid sequence of SEQ ID NO: 6" these claims are in fact directed to isolated nucleic acid molecules having 85%, 90%, or 95% identity to at least nucleotides 1-966 of SEQ ID NO: 5. As such, Applicants respectfully request that this rejection of claims 1-14, 17, and 23 be withdrawn. Further, Applicants submit that the specification fully enables the all of the pending claims of the instant application. The specification provides the nucleotide sequence of a partial human cDNA clone, SEQ.ID. NO: 5, that encodes hPDGF-D. The amino acid sequence of hPDGF-D is also provided as SEQ ID NO: 6. In addition, the specification further describes the structure of PDGF-D. The

specification also provides substantial guidance for producing polynucleotide sequences and further discloses recombinant techniques for producing polypeptides. It should also be noted that it was well within the abilities and skill of one of ordinary skill in the art to produce polypeptides of various sizes using recombinant techniques, especially when provided with both the polypeptide and nucleotide sequences of a given protein. Further, one of ordinary skill in the art would understand that due to the degenerative nature of the genetic code that nucleic acid sequences need not be identical to encode the same protein. As such, the specification fully enables on of skill in the art to make polynucleotides of 85%, 90%, or 95% to SEQ.ID. NO: 5, that encode polypeptides having PDGF-D activity. Thus, the invention as claimed is fully enabled.

Claims 10-11 stand rejected under 35 U.S.C. § 112, first paragraph, based on an assertion that the specification, while being enabling for an isolated or cultured cell comprising an expression vector, does not reasonably provide enablement for a host cell comprising an expression vector.

Applicants respectfully disagree. Claims 10-11 are directed to eukaryotic or prokaryotic host cells transformed or transfected with a vector comprising the nucleic acid molecule of claim 1. Claims 10-11 are fully enabled by the specification. Paragraph 0053 describes host cells in accordance with the claimed invention provides examples of host cells that can be used to make the invention of claims 10-11. Given the description and examples present in

paragraph 0052, one of ordinary skill in the art would clearly understand what the phrase "host cell" means in the context of claims 10-11 and would be able to make the invention of claims 10-11 with the guidance provided in the specification. Accordingly, reconsideration of this enablement rejection under 35 U.S.C. 112, first paragraph, is respectfully requested.

Claims 1-14, 17, and 23 stand rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which that Applicants regard as the invention.

The Office states that claim 1 is indefinite in its recitation of the phrase "stringent conditions." Applicants respectfully disagree. One of ordinary skill in the art would clearly understand the term "stringent conditions" as it appears in claim 1. Hybridization techniques were well known in the art at the time of the invention and were important in identifying non-identical nucleic acid sequences encoding the same or similar amino acid sequences. Further, given the teachings of the specification, and the limitations of the claims, one of ordinary skill in the art would readily recognize the metes and bounds of claim 1. Accordingly, reconsideration of this rejection under 35 U.S.C. 112, second paragraph, is respectfully requested.

Claim 14 stand rejected as indefinite in its recitation of the phrase "RKSK or structurally conserved amino acid sequences thereof." Claim 14 has been amended in order to obviate this rejection.

In view of the foregoing remarks, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this response or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 029065.44833C2).

Respectfully submitted,

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